

H-OFLD Old Field Weedy Herbaceous Vegetation

Associations and Alliances

Local Stand (no NVC Alliance at this time)

Common Species

- Celtis laevigata*
- Sapindus saponaria*
- Prosopis glandulosa*
- Clematis drummondii*
- Torilis arvensis*
- Viguiera dentata*
- Nassella leucotricha*
- Sorghum halepense*

Description

This type was used to map the variable early succession vegetation occurring on old fields. Old fields are located on the natural terraces and artificial levees bordering the San Antonio River in the Missions unit and in some of the fallow fields surrounding the Rancho unit. At the Missions Unit, this type occurs on both raised artificial and natural terraces along the San Antonio River. Species composition is variable depending on past management, fire suppression, and introduction of exotic species. The vegetation in this type is mainly comprised of grasses and weedy forbs that were typically less than 5 meters high. In some sites, succession was replacing the grasses with saplings of *Celtis laevigata*, *Acacia farnesiana*, *Diospyros texana*, *Ligustrum japonicum*, *Melia azedarach*, *Prosopis glandulosa*, and *Sapindus saponaria*. On the color infrared imagery this type had a mottled signature characteristic of the variable species composition. Colors ranged from bright red (actively growing species) to dark gray (dormant species)

Range and Distribution

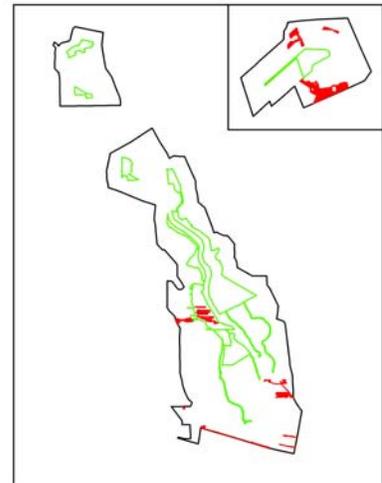


Photo Signature Example



Representative Ground Photo



NEW Old Field Weedy Herbaceous Vegetation

ENVIRONMENTAL DESCRIPTION

The environmental factors that influence the composition and structure of this community are: climate, topography, soils, and past management. This community occurs on the natural terraces and artificial levees (from fill dredged for channelization) bordering the San Antonio River. The community occurs on alluvium-derived clay-loam. Immediately adjacent to the channelized banks of the river, the clay loams overlies caliche gravel that was dredged from the river channel. Water availability is less than in pre-urbanized times due to lowering of the water table through channelization and rising of the levees along the channel. Transpiration appears to be high in this open, sunlit community. Composition at any given site is probably largely dependent on past management, fire suppression, and introduction of exotic species. Flooding of major proportions does not occur as it once did due to impoundments and channelization along the river.

VEGETATION DESCRIPTION

The canopy is typically less than 5 m high with about 30% cover, except for scattered young trees that constitute no more than 10% cover. The vegetation is dominated by saplings. Of these, the most common species is *Celtis laevigata*, but other species to be expected in the mix include *Acacia farnesiana* (not observed in sample plot), *Diospyros texana* (not observed in sample plot), *Ligustrum japonicum* (not observed in sample plot), *Melia azedarach* (not observed in sample plot), *Prosopis glandulosa*, and *Sapindus saponaria*. The ground layer is similar to that found in the open phases of the **Thorn Tree Ruderal Woodland** in that it consists of a mix of weedy native and exotic forbs and grasses.

FLORISTIC COMPOSITION

<u>Species Name</u>	<u>Stratum</u>	<u>Lifeform</u>
<i>Celtis laevigata</i>	Shrub/sapling (tall & short)	Broad-leaved deciduous tree
<i>Sapindus saponaria</i>	Shrub/sapling (tall & short)	Broad-leaved deciduous tree
<i>Prosopis glandulosa</i>	Shrub/sapling (tall & short)	Thorn tree
<i>Clematis drummondii</i>	Herb (field)	Vine/liana
<i>Torilis arvensis</i>	Herb (field)	Forb
<i>Viguiera dentata</i>	Herb (field)	Forb
<i>Nassella leucotricha</i>	Herb (field)	Graminoid
<i>Sorghum halepense</i>	Herb (field)	Graminoid

OTHER NOTEWORTHY SPECIES

<u>Species Name</u>	<u>GRank</u>	<u>Animal</u>	<u>Note (specify Rare (geog area), Invasive, Animal, or Other)</u>
<i>Ligustrum japonicum</i>			Invasive alien
<i>Melia azedarach</i>			Invasive alien
<i>Sorghum halepense</i>			<u>Subinvasive alien</u>
<i>Torilis arvensis</i>			Invasive alien

CLASSIFICATION & OTHER COMMENTS

Classification Comments: This vegetation class is a sere in the succession between old field grasslands and *Carya illinoensis* – *Celtis laevigata* Forest. It appears that *Acacia farnesiana* – (*Prosopis glandulosa*) Woodland does not develop on these sites before mature trees of *Celtis laevigata* come to dominate the site. It is not clear what the factors are that control whether seedlings/saplings of *Celtis laevigata* or other broadleaf species dominate or whether thorn trees dominate after open grasslands.

Other Comments: This vegetation unit is defined only for the old fields of San Antonio NHP.

ELEMENT DISTRIBUTION

This vegetation occurs only in the San Antonio Unit on both raised artificial and natural terraces along the San Antonio River, especially in the Espada and San Juan *Labores*.

ELEMENT SOURCES

Inventory Notes:

Plots: SAAN.15

Description Author(s): R. Sanders